REMARKS

Claims 4 and 13-62 were presented for examination, and claims 4 and 13-62 were rejected. Thus, claims 4 and 13-62 are presently pending in this application, of which claims 4, 13, 27, and 49 are independent. Applicant submits that claims 4 and 13-62 are in condition for allowance.

The following comments address all stated grounds of rejection. Applicant respectfully traverses each rejection and urges the Examiner to pass the claims to allowance in view of the remarks set forth below.

Interview Summary

Applicant and his attorneys thank the Examiner for the Examiner's Interview conducted on April 8, 2005. As described in the Interview Summary dated April 11, 2005, the substance of the interview included discussing the mapping limitation and the interpretation of other claim language in view of U.S. Patent No. 6,249,755 to Yemini et al ("Yemini"). Discussions between Applicant's attorney and the Examiner included clarification of citations of column 1, lines 24-26, and column 2, lines 4-46 of Yemini in view of independent claim 27 and other independent claims. Applicant notes that the Examiner agreed that Yemini does not teach or suggest the mapping limitation for a service supporting a business process under service level management, and thus, cites new grounds of rejection in the current Office Action.

Claim Rejections Under 35 U.S.C. §103

I. Claims 4, 13-17, 19-35, 37-53 and 55-62 Rejected Under 35 U.S.C §103 As Unpatentable Over Yemini in View of Bhoj

Claims 4, 13-17, 19-35, 37-53 and 55-62 rejected under 35 U.S.C. 103(a) as unpatentable over Yemini in view of U.S. Patent No. 6,304,892 to Bhoj et al. ("Bhoj"). Applicant respectfully traverses this rejection.

A. Independent Claim 4 Patentably Distinguished over Yemini in view of Bhoj

Independent claim 4 is directed towards a method of monitoring a state of a service that supports a business process under service level management in association with a service level management domain. The business process is performable in connection with a portion of the network. The service is mapped to selected components of a network. The method includes monitoring the selected network components to determine the state of the service supporting the business process under service level management in association with the service level management domain, and *monitoring the state of the service to detect a change in the state. When the state of the service changes, the method includes determining a cause of the change in the state of the service* by performing an action. The action may be one or more of the following: 1) invoking a routine to determine an operational characteristic of at least one of the selected network components, 2) constructing a database query to determine the operational characteristic of at least one of the selected network components, 3) requesting a change to one or more parameters of at least one of the selected network components, and 4) a reasoning mechanism to determine the action to invoke. Applicant submits that Yemini in view of Bhoj fails to teach or suggest each and every element of the claimed invention.

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Yemini in view of Bhoj does <u>not</u> teach or suggest *monitoring a state of a service to detect a change in the state.* In contrast, Yemini discusses a code-based event correlation approach to detecting and identifying problems in complex systems. The event correlation of Yemini takes an event stream as input, detects occurrence of exceptional events in the event stream, and identifies the occurrence of a particular event (see column 2, lines 37-40, Yemini). Instead of *monitoring a state of a service to detect a change in the state*, Yemini detects events representing symptoms and determines that a particular event has occurred (see column 11, lines 15-17, Yemini). Yemini uses a codebook to correlate symptoms represented by events to problems corresponding to the symptom (see column 11, lines 23-26). Yemini is <u>not</u> concerned with and does <u>not</u> discuss *monitoring a state of a service to detect a change in the state* of the service. That is, Yemini is <u>not</u> state aware of an item such as a service associated with a network component, and does <u>not</u> provide a stateful mechanism for monitoring states and changes in states. Rather, Yemini is concerned with isolating a fault to generate a report identifying the fault. Thus, Yemini <u>fails</u> to teach or suggest *monitoring a state of a service to detect a change in the state.*

Furthermore, Yemini does <u>not</u> teach or suggest *determining a cause of the change in the state of the service.* Instead, Yemini uses an event decoder and codebook to determine a problem corresponding to a symptom represented by an event (see column 12, lines 22-33, Yemini). The event decoder of Yemini receives events as vectors of symptoms and retrieves values from the codebook corresponding to the vectors. Yemini is <u>not</u> concerned with determining a cause of the change in the state of the service, but rather is concerned with matching an event with a problem. As a result of event correlation, Yemini outputs a report of the problem. As such, Yemini detects

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and identifies the problem but does <u>not</u> further determine a cause of the problem. Thus, Yemini <u>fails</u> to teach or suggest *determining a cause of the change in the state of the service.*

In the Office Action, the Examiner cites Bhoj to suggest one ordinarily skilled in the art might modify Yemini to monitor a service supporting a business process under service level management in association with a service level management domain. Bhoj does <u>not</u> teach or suggest each and every element of the claimed invention, such as *determining a cause of the change in the state of the service.* As such, Bhoj <u>fails</u> to bridge the factual deficiencies of the Yemini reference.

Moreover, there must be motivation or suggestion in the references or in the knowledge of one ordinarily skilled in the art to modify Yemini in view of Bhoj. The test for combining references is not what the individual references themselves suggest but rather what the combination of the disclosures as a whole would suggest to one ordinarily skilled in the art. *In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).* The references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek, 163 USPQ 545 (CCPA 1969).* In the Office Action, the Examiner indicates one ordinarily skilled in the art would modify Yemini in view of Bhoj because it would allow management of data access network systems without one domain having complete access to each of the data service systems of the data access network system. Applicant respectfully notes the Examiner cites a use of the method of Bhoj as a motivation or suggestion to combine the references. Applicant respectfully disagrees with the Examiner and submits that there is no suggestion or motivation in the references of Yemini and Bhoj, or in the knowledge of one ordinarily skilled in the art to combine Yemini in view of Bhoj.

Yemini is directed towards a fault isolation and event correlation system using a codebook. In contrast, Bhoj is directed towards a system having at least two data management service systems and selectively sharing management data between the two systems. The disclosure of Bhoj suggests to one ordinarily skilled in the art a method for selectively sharing management data between a plurality of data management service systems. The disclosures of Yemini and Bhoj as a whole do <u>not</u> provide a suggestion or motivation to combine a codebook-based event correlation system with a plurality of data management service systems that selectively share management data. That is, one ordinarily skilled in the art at the time of the claimed invention would <u>not</u> be motivated by or find a suggestion in the teachings of the selective sharing techniques of Bhoj to combine Bhoj with the teachings of the codebook-based event correlation of Yemini. Thus, there is no suggestion or motivation in the references of Yemini and Bhoj, or in the knowledge of one ordinarily skilled in the art to combine Yemini in view of Bhoj.

At least for the aforementioned reasons, Applicant submits that Yemini in view of Bhoj fails to teach or suggest each and every element of independent claim 4. Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claim 4 under 35 U.S.C. §103.

B. <u>Independent Claims 13 and 49 Patentably Distinguished over Yemini in view of Bhoj</u>

Independent claims 13 and 49 are directed towards a method and a computer program product, respectively, to monitor a service supporting a business process under service level management in association with a service level management domain. The business process depends on a portion of a network and the service level management domain includes an

enterprise management system having an interface configured to communicate with at least one

of a network management system, a system management system, an application management

system, and a traffic management system. These independent claims recite *associating a*

component of the network to the service supporting the business process under service level

management in association with the service level management domain, *monitoring a parameter*

of the associated network component indicating an operational characteristic of the network

component, and *determining a state of the service from the parameter of the monitored network*

component. These independent claims further recite monitoring the state of the service to

provide service level management for the business process. Applicant submits that Yemini in

view of Bhoj <u>fails</u> to teach or suggest each and every element of the claimed invention.

Yemini in view of Bhoj does <u>not</u> teach or suggest *associating a component of the network*

to a service, monitoring a parameter of the associated network component, and *determining a*

state of the service from the parameter of the monitored network component. Rather, Yemini

associates symptoms with problems, detects exceptional events from an event stream, and

correlates a symptom represented by the event to a problem by looking up problem codes in a

codebook. The codebook of Yemini has a matrix having rows of symptoms associated with

columns of problem codes (see lines 52-54, column 14, and Figures 1C, 2F, 2G, Yemini). As

such, Yemini associates events/symptoms with problem codes instead of associating a network

component with a service as in the claimed invention.

Instead of monitoring a parameter of an associated network component to determine a

state of a service as in the claimed invention, Yemini monitors events to determine the

occurrence of a problem corresponding to a symptom of an event. An event detector of Yemini

monitors events and passes a detected event to an event decoder, which determines a problem

from the codebook corresponding to the event (see column 12, lines 22-33, Yemini). As such,

Yemini is <u>not</u> concerned with a state of a service, or determining a state of a service.

Furthermore, Yemini does <u>not</u> describe any mechanism for determining a state of service from a

parameter of a network component. Instead, Yemini determine a likely problem causing the

detected event. Thus, Yemini <u>fails</u> to teach or suggest *associating a component of the network to*

the service, monitoring a parameter of the associated network component, and *determining a*

state of the service from the parameter of the monitored network component.

In the Office Action, the Examiner cites Bhoj to suggest one ordinarily skilled in the art

might modify Yemini to monitor a service supporting a business process under service level

management in association with a service level management domain. Bhoj does <u>not</u> teach or

suggest each and every element of the claimed invention, such as a *mapping mechanism for*

associating a component of the network to a service. Thus, Bhoj <u>fails</u> to bridge the factual

deficiencies of the Yemini reference.

Moreover, there must be motivation or suggestion in the references or in the knowledge

of one ordinarily skilled in the art to modify Yemini in view of Bhoj. T The test for combining

references is not what the individual references themselves suggest but rather what the

combination of the disclosures as a whole would suggest to one ordinarily skilled in the art. *In re*

McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The references are evaluated by

what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek,*

163 USPQ 545 (CCPA 1969). In the Office Action, the Examiner indicates one ordinarily

skilled in the art would modify Yemini in view of Bhoj because it would allow management of

data access network systems without one domain having complete access to each of the data

service systems of the data access network system. Applicant respectfully disagrees with the

Examiner and submits that there is no suggestion or motivation in the references of Yemini and

Bhoj, or in the knowledge of one ordinarily skilled in the art to combine Yemini in view of Bhoj.

Yemini is directed towards a fault isolation and event correlation system using a

codebook. In contrast, Bhoj is directed towards a system having at least two data management

service systems and selectively sharing management data between the two systems. The

disclosure of Yemini suggests to one ordinarily skilled in the art to use a codebook for event

correlation while the disclosure of Bhoj suggests to one ordinarily skilled in the art a method for

selectively sharing management data between a plurality of data management service systems.

As such, the disclosures of Yemini and Bhoj as a whole do not provide a suggestion or

motivation to combine a codebook-based event correlation system with a plurality of data

management service systems that selectively share management data, and furthermore, do not

teach or suggest the claimed invention. One ordinarily skilled in the art at the time of the

claimed invention would not be motivated by or find a suggestion in the teachings of the

selective sharing techniques of Bhoj to combine Bhoj with the teachings of the event correlation

codebook techniques of Yemini to teach or suggest the claimed invention. Thus, there is no

suggestion or motivation in the references of Yemini and Bhoj, or in the knowledge of one

ordinarily skilled in the art to combine Yemini in view of Bhoj.

At least for the aforementioned reasons, Applicant submits that Yemini in view of Bhoj

fails to teach or suggest each and every element of independent claims 13 and 49. Claims 14-26

depend on and incorporate all the patentable subject matter of claim 13, and claims 50-62 depend

on and incorporate all the patentable subject matter of claim 49. Thus, Yemini in view of Bhoj

fails to detract from the patentability of claims 14-26 and 50-62. Therefore, Applicant

respectfully requests the Examiner to reconsider and withdraw the rejection of claims 13-26 and 49-62 under 35 U.S.C. §103.

C. Independent Claim 27 Patentably Distinguished over Yemini in view of Bhoj

Independent claim 27 is directed towards a system for monitoring a service supporting a business process under service level management in association with a service level management domain. The service level management domain includes an enterprise management system having an interface configured to communicate with at least one of a network management system, a system management system, an application management system, and a traffic management system. The business process is performable in connection with a portion of a network. The system includes *a mapping mechanism for associating a component of the network to the service* supporting the business process under service level management in association with the service level management domain, and a monitoring mechanism for monitoring a parameter of the associated network component. The parameter indicates an operational characteristic of the network component. The system also includes a reasoning mechanism for determining a condition of the service from the parameter of the monitored network component, and a service monitoring mechanism for monitoring the condition of the service supporting the business process to provide service level management of the business process. Applicant submits that Yemini in view of Bhoj fails to teach or suggest each and every element of the claimed invention.

Yemini in view of Bhoj does not teach or suggest *a mapping mechanism for associating a component of the network to the service.* Rather, Yemini discusses an event decoder and codebook that correlates symptoms of events with problems. Instead of *associating a component*

of the network to the service as in the claimed invention, Yemini associates a symptom with a problem. The codebook of Yemini has a set of symptoms in the rows of a matrix correlated to distinct codes, such as number codes (see lines 52-54, column 14, and Figures 1C, 2F, 2G, Yemini). The event decoder receives a detected event from an event detector and decodes the event by performing a lookup in the codebook to determine the problem code associated with the symptom of the event (see Figures 1A and 1B, Yemini). Neither the event decoder nor the codebook of Yemini refer to a component of the network or a service associated with the network component. As such, Yemini does <u>not</u> describe a mechanism for *associating a component of the network to a service*. Instead, Yemini describes a mechanism directed towards fault isolation by mapping problem codes to symptoms. Thus, Yemini <u>fails</u> to teach or suggest *a mapping mechanism for associating a component of the network to the service.*

In the Office Action, the Examiner cites Bhoj to suggest one ordinarily skilled in the art might modify Yemini to monitor a service supporting a business process under service level management in association with a service level management domain. Bhoj does <u>not</u> teach or suggest each and every element of the claimed invention, such as a *mapping mechanism for associating a component of the network to a service*. Thus, Bhoj <u>fails</u> to bridge the factual deficiencies of the Yemini reference.

Moreover, there must be motivation or suggestion in the references or in the knowledge of one ordinarily skilled in the art to modify Yemini in view of Bhoj. The test for combining references is not what the individual references themselves suggest but rather what the combination of the disclosures as a whole would suggest to one ordinarily skilled in the art. *In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).* The references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek,*

163 USPQ 545 (CCPA 1969). Applicant contends that the disclosures of Yemini and Bhoj

considered as a whole do <u>not</u> provide a suggestion or motivation to combine Yemini in view of

Bhoj. The disclosure of Yemini suggests to one ordinarily skilled in the art to use a codebook

for event correlation while the disclosure of Bhoj suggests to one ordinarily skilled in the art to

selectively share management data between a plurality of data management service systems. The

disclosures of Yemini and Bhoj as a whole do <u>not</u> provide a suggestion or motivation to combine

a codebook-based event correlation system with a plurality of data management service systems

that selectively share management data. Thus, there is no suggestion or motivation in the

references of Yemini and Bhoj, or in the knowledge of one ordinarily skilled in the art to

combine Yemini in view of Bhoj.

At least for the aforementioned reasons, Applicant submits that Yemini in view of Bhoj

fails to teach or suggest each and every element of independent claim 27. Claims 28-48 depend

on and incorporate all the patentable subject matter of claim 27. Thus, Yemini in view of Bhoj

fails to detract from the patentability of claims 28-48. Therefore, Applicant respectfully requests

the Examiner to reconsider and withdraw the rejection of claims 27-48 under 35 U.S.C. §103.

II. <u>Claims 18, 36 and 54 Rejected Under 35 U.S.C §103 As Unpatentable Over Yemini in view</u>
<u>of Bhoj in further view of Glitho</u>

Claims 18, 36 and 54 rejected as being unpatentable over Yemini in view of U.S. Patent

No. 6,233,449 to Glitho et al. ("Glitho"). Applicant respectfully traverses this rejection.

A. Non-obviousness of Claims Dependent from Patentable Independent Claims 13, 27, and 46

Yemini in view of Bhoj in view Glitho fails to teach or suggest each and every claim limitation of dependent claims 18, 36, and 54. Claim 18 depends on and incorporate all the patentable subject matter of independent claim 13. Claim 36 depends on and incorporate all the patentable subject matter of independent claim 27. Claim 54 depends on and incorporate all the patentable subject matter of independent claim 46. Yemini in view of Bhoj does not teach or suggest each and every feature of independent claims 13, 27, and 46 for the reasons discussed above in connection with the rejections of these independent claims. As such, claims 18, 36, and 54 are also not taught or suggested by Yemini in view of Bhoj. Examiner cites Glitho merely to suggest the one ordinarily skilled in the art might modify Yemini in view of Bhoj to use an agent associated with a monitored network component. Glitho fails to teach or suggest each and every element of independent claims 13, 27, and 46, and as such, Glitho fails to bridge the factual deficiencies of the Yemini and Bhoj references. Therefore, Yemini in view of Bhoj in further view of Glitho fails to teach or suggest each and every element of dependent claims 18, 26, and 54.

For at least the aforementioned reasons, Applicant submits that Yemini in view of Glitho fails to detract from the patentability of claims 18, 36, and 54. Accordingly, Applicant respectfully requests the Examiner to withdraw the rejection of claims 18, 36 and 54 under 35 U.S.C. §103.

CONCLUSION

In light of the aforementioned arguments, Applicant contends that the Examiner's rejections have been adequately addressed and all of the pending claims are in condition for allowance. Accordingly, Applicant respectfully requests reconsideration, withdrawal of all grounds of rejection, and allowance of all of the pending claims.

Should the Examiner feel that a telephone conference with Applicant's attorney would expedite prosecution of this application, the Examiner is urged to contact the Applicant's attorney at the telephone number identified below.

Dated: June 13, 2005   Respectfully submitted,

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